POLAR
PAM
3257

POLARPAM

Pam: 598.2: (*49)
USBSFW

TO HAVE AND TO HOLD

Alaska's Migratory Birds

Pam:
598.2:(*49)
USBSFW



to have and to hold

ALASKA'S MIGRATORY BIRDS

foreword

The life cycles of tens of millions of Northern Hemisphere waterfowl, sea birds and other species are dependent upon Alaska's islands, coastal plains, river valleys and marine waters. This incredible abundance of life is a little known saga of nature.

This report decribes Alaska's key role in producing these birds, most of which are enjoyed by people in the rest of the United States, and identifies the vital habitat that must be preserved if these wild flocks are to survive.

The focus is on waterfowl, but preservation of their marine and marshland environment will benefit all far northern birds. It will also protect living space for the rest of Alaska's storied wildlife.

As the crucial decisions affecting Alaska's future development are being made, it is essential that we be aware of this magnificent wildlife treasure and take every step necessary to maintain its integrity for all time.

Rogers C. B. Morton
Secretary of the Interior

UNITED STATES DEPARTMENT OF THE INTERIO
FISH AND WILDLIFE SERVICE, BUREAU OF SPORT FISHERIES AND WILDLI

For sale by the Superintendent of Documents, U.S. Government Printing Office Washington, D.C. 20402 - Price 35 cents - Stock Number 2410-20

they come from the ends of the earth

As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities for water, fish, wildlife, mineral, land, park, and recreational resources. Indian and Territorial affairs are other major concerns of this department of natural resources.

The Department works to assure the wisest choice in managing all our resources so that each shall make its full contribution to a better United States now and in the future.

U.S. GOVERNMENT PRINTING OFFICE: 1971—O-449-748



BOREAL INSTITUTE
LIBRARY
Rec'd: OCT 2 1973
Order: Nat Letter
Price
Acc. No. 12239

a gathering pla

Alaska is a focal point for birds of three c
nents — the terminus of migrations which may sta
Argentina, Tasmania, South China, Cape Horn,
son Bay or Siberia. Journeys of 10,000 miles ar
unusual. Traveling across continents and oc
birds seek places to nest in a country unchange
man, resting and foraging in waters still unpoll

Habitats and migratory traditions of many Ala
birds were formed during the Pleistocene, a gl
period when much of America was covered with
Alaska was joined to Asia by a land bridge. As gla
melted, flood plains formed in valleys; ocean w
rose, covering lowlands and creating shallow
These areas provide for Alaska's birds today.







(Far left) Trumpeter swans head north.

(Left) Kittiwakes—birds of the open seas.

(Above) These rocky shores furnish nesting areas to millions of sea birds.

(Above right) Snow geese over Yukon Delta en route to Siberian nesting grounds.

(Right) Murres cover an island in the Bering Sea.



waterfowl for america

Ducks, geese, and swans from Alaska travel t
the States, most Provinces of Canada, Mexico an
far south as Panama. Some of these areas pro
feeding and resting places during migration; ot
provide winter homes. Most importantly, the m
tion of each species is distinctive and unic
adapted to its requirements.

Alaska provides approximately 12 million N
American waterfowl and is essential to several spe
that nest no place else.



NESTING AREAS

SIBERIA

Snow Geese
Black Brant
Pintail
Steller's Eider

ALASKAN NESTING AREAS

CANADIAN ARCTIC

Black Brant
Snow Geese
King Eider
Old Squaw

WINTERING AREAS

ASIAN COAST

Old Squaw
Bufflehead

ALASKA SOUTH COASTS

Trumpeter Swan*
Vancouver Canada Geese*
Emperor Geese*
Mallard
Aleutian Teal*
Scaup
Bufflehead
Old Squaw
Harlequin
Scoter
Eider
Merganser

PACIFIC ISLANDS

Pintail

CENTRAL FLYWAY

Pacific White-fronted Geese*
Mallard
Pintail
Widgeon
Green-winged Teal
Shoveler
Canvasback
Scaup

ATLANTIC FLYWAY

Whistling Swan*
Pintail
Widgeon
Canvasback
Scaup

PACIFIC FLYWAY

Whistling Swan*
Trumpeter Swan*
Pacific White-fronted Geese*
Black Brant*
Canada Geese
Cackling*
Aleutian*
Dusky*
Taverner*
Mallard
Pintail
Widgeon
Green-winged Teal
Shoveler
Canvasback
Scaup

MISS. FLYWAY

Pintail
Widgeon
Green-winged Teal
Canvasback
Scaup

MEXICO

White-fronted Geese*
Black Brant*
Pintail
Lesser Scaup

CARIBBEAN

Lesser Scaup

*More than 50% of World Population Nest in Alaska (12 varieties)







(Left) Scaup from Alaska are found in 43 States.

(Above) World's black brant population could be wiped out by oil spill in their staging area.

(Above right) Whistling swans from the Arctic Slope in Chesapeake Bay.

(Right) Alaskan and Canadian ducks on Tule Lake Refuge in California.



key

KOYUKUK
32

Nesting Areas
Number of birds per square mile

Important Migrating Habitats

Inside Continental Shelf

Outside Continental Shelf

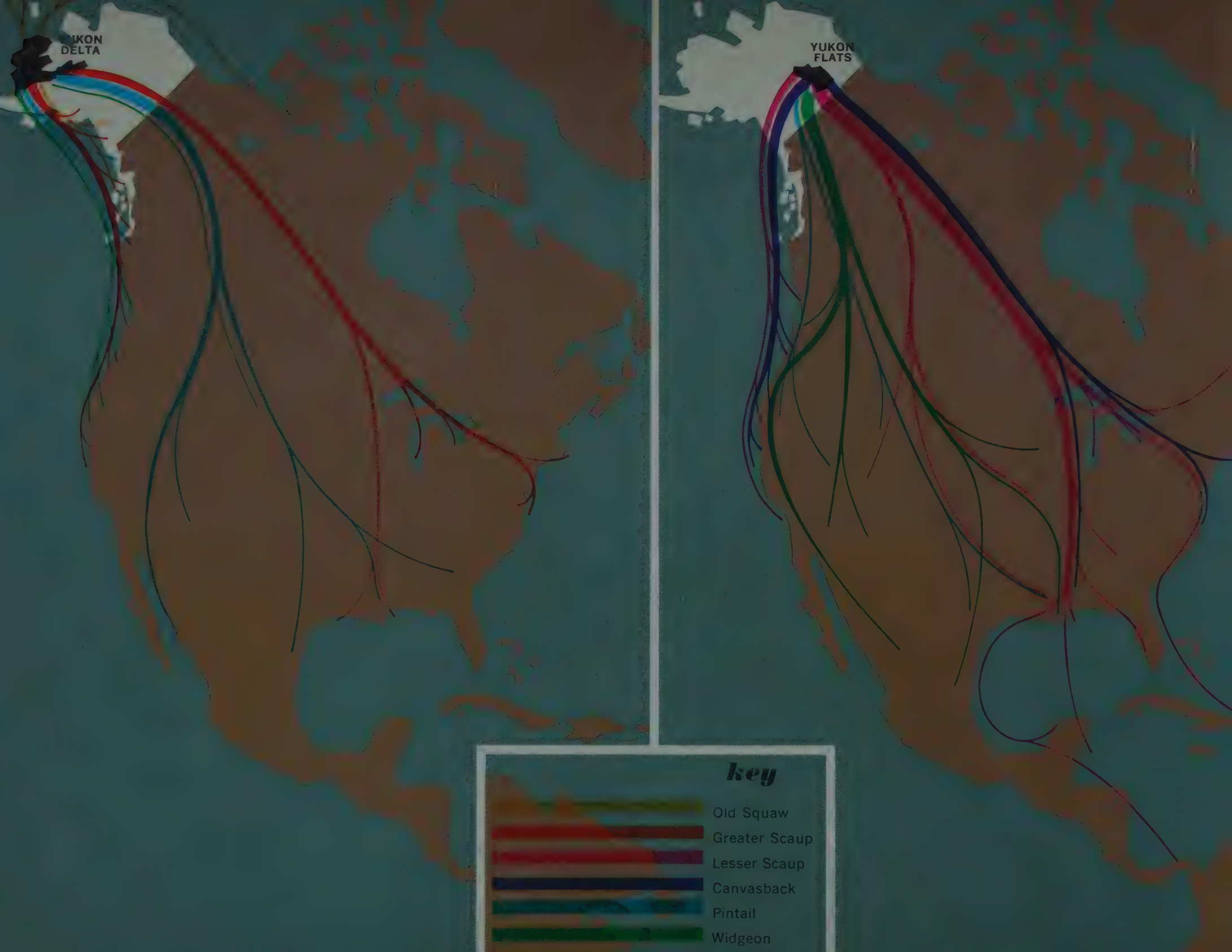
National Wildlife Refuges



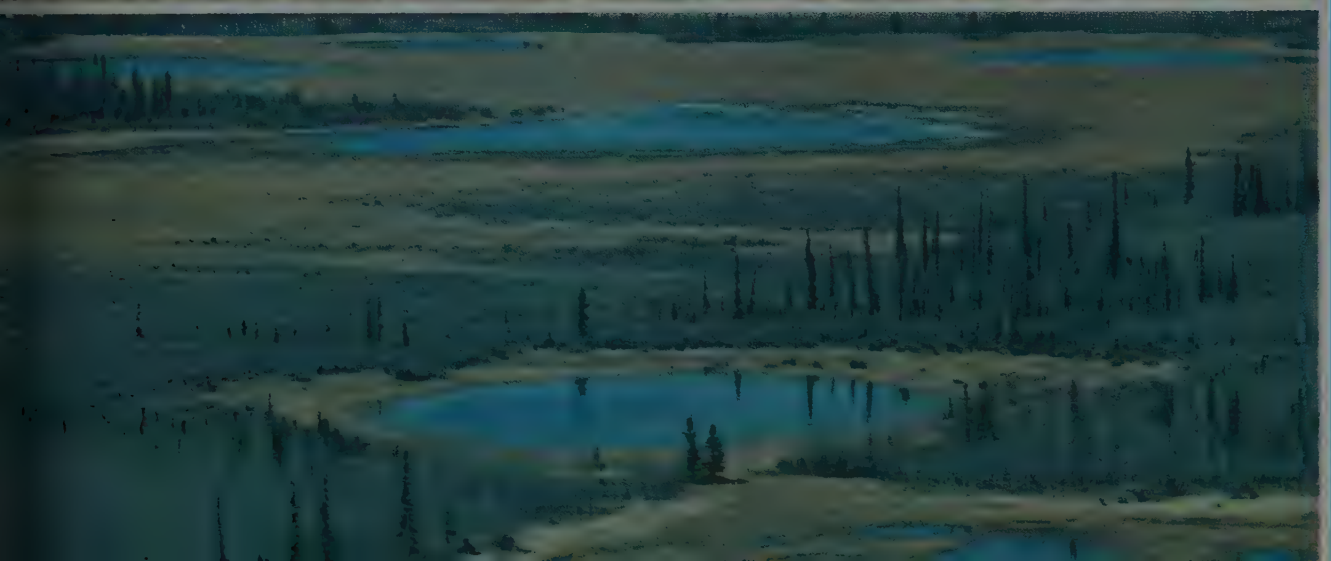
alaskan habitat

Water is the key to habitat for Alaskan birds: water in lakes, rivers, lagoons and the open sea. A million ponds are scattered over the warm "sunbowl" valleys of the Yukon, Tanana and Koyukuk Rivers, the cool coastal plains of the Arctic Slope and the lush tundra of the Yukon Delta. Here, millions of waterfowl, shore and water birds find places to nest and rear their young; canvasback and scaup from Chesapeake Bay and Louisiana mingle with widgeon and shovelers from the Sacramento Valley and mallards from Puget Sound. Surrounding forests provide a home for ospreys, warblers and thrushes.

The volume of life reaches its peak on ocean shores and estuaries. Tideflats of the Yukon Delta, coastal lagoons and barrier beaches of the Arctic Coast and Alaska Peninsula and sheltered bays of the Gulf of Alaska are vital to the existence of these species. *All* black brant and most emperor geese pass through Izembek Bay where 300,000 geese and as many ducks may gather at one time. On tideflats of the Yukon Delta pintails and eiders forage at the water's edge; sandpipers, plovers, godwits and knots probe the adjacent mud. Thousands of wings flash in the sky, then disappear as they turn and no longer reflect the sun.


YUKON DELTA
YUKON FLATS
key
Old Squaw
Greater Scaup
Lesser Scaup
Canvasback
Pintail
Widgeon





the yukon flats
the yukon delta

The flats of the upper Yukon and the delta at its mouth are the two richest waterfowl producing habitats in Alaska. Each area sends over 2 million birds south every fall.

Diving ducks from both areas disperse over the four flyways. Lesser scaup have been reported in 40 States, greater scaup in 27, and canvasback in 25. Most puddle ducks travel less widely, but widgeon have been reported in 24 States, pintails in 21, shovelers in 9 and mallards in 7. Most Yukon geese winter in the Pacific Flyway. White-fronted geese from the Delta fly over water directly to California; others travel inland over Central Canada and the Midwest to winter in Louisiana, Texas and Mexico. Whistling swans from the Delta winter in California, Nevada, and Utah.

(Above) Yukon Delta produces 90 percent of world's emperor geese.

(Below) Ponds of Yukon Flats.





(Above) Arctic terns migrate between Alaska and Antarctica each year.

(Left) Wandering albatross nest almost exclusively on Bird Island.

(Above right) Marine mammals throughout northern waters

(Right) Bristle-thighed curlew breeds solely in Alaska.

(Far right) Three-toed woodpecker is found farther to the south

a distant shores

Even without large populations of waterfowl, Alaska ld be unique for its myriad flocks of shore and er birds. Arctic and red-throated loons are prom- nt nesting species. Smaller birds include godwits, sandpipers, phalaropes, turnstones, plovers d curlews.

That great naturalist Ira Gabrielson described the nual migration of shearwaters along the Alaskan the "greatest panorama of life on the North merican Continent."

Flying to and from Alaska in odysseys that stagger e imagination, these birds reach out to touch and rill people of many lands.

International treaties, as the one recently made with apan, are designed to protect these species. How- ver, if they ever lost their nesting, staging or winter- ng areas in Alaska, the ancient circle would be forever roken.







a pageant of wildlife

Lands and waters vital to Alaska's birds are also essential for the rest of the State's wildlife. The forest and tundra habitats support a broad spectrum of mammals from lemmings to moose.

The coastal waters of Alaska are among the richest marine areas in the world. Whales and seals take advantage of this bounty by summer migrations into the area. Other marine mammals, such as the walrus and the sea otter, are year-round residents. Fish resources are immense and provide protein for the people of the Soviet Union, Japan and Korea as well as the United States.

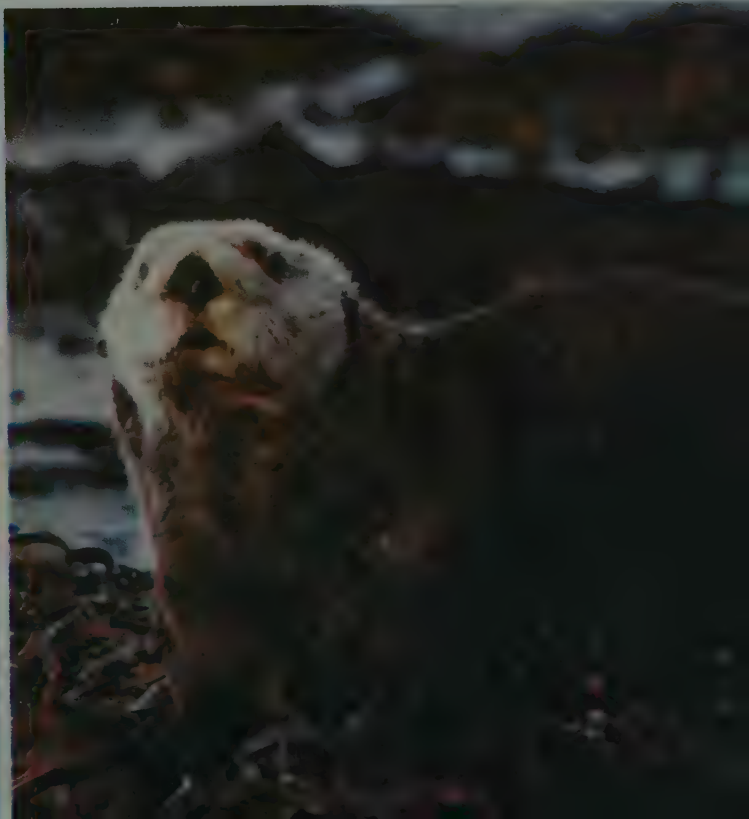




(Above) Sea lions abound in Bristol Bay, richest of all Arctic waters.

(Left) The Alaskan brown bear and the salmon – symbols of this wild land's splendor.

(Right) Sea otters are slowly repopulating their traditional range.





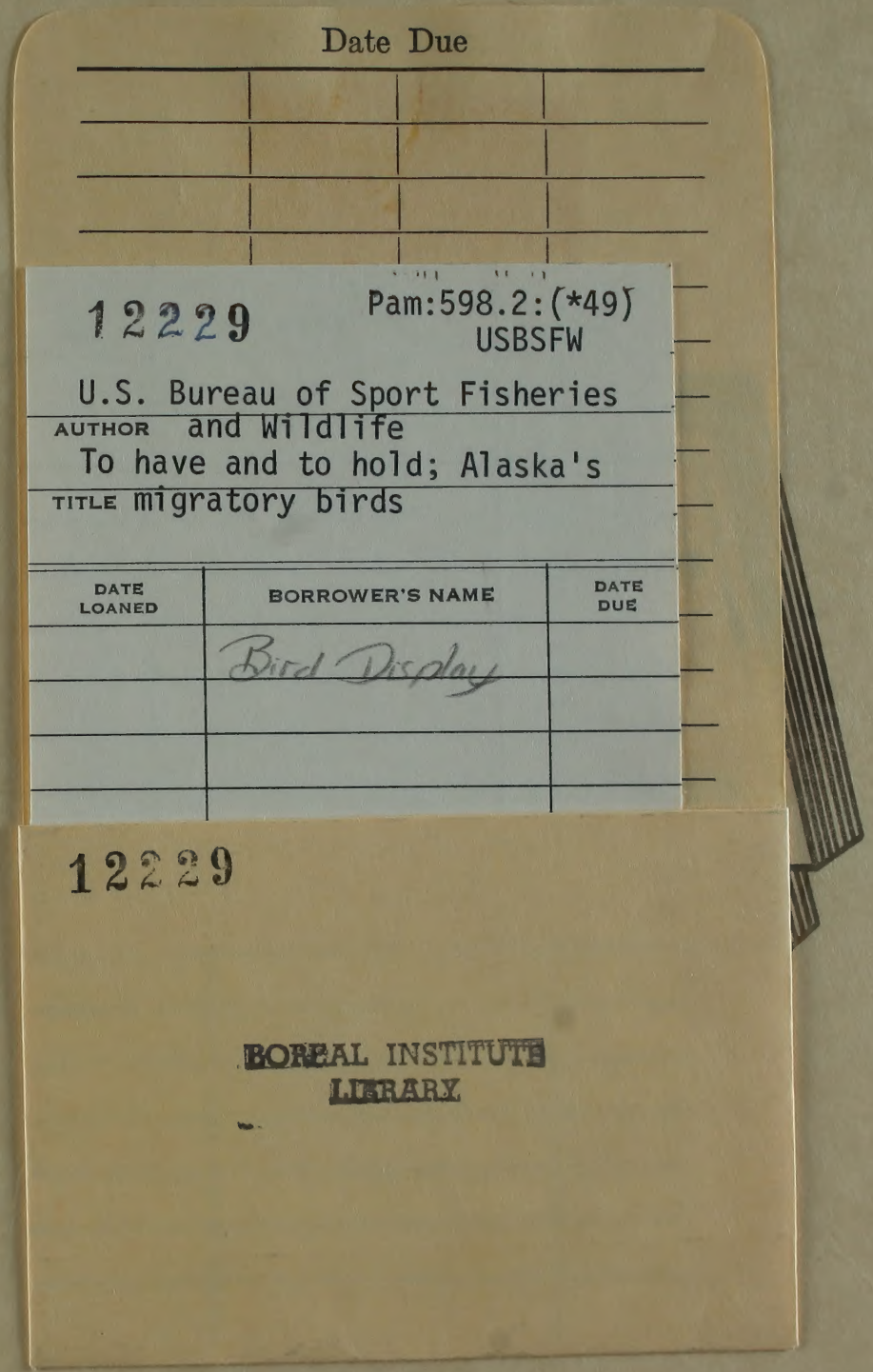
Alaska's wildlife bounty is spread to every State of the Union and across the world. Its preservation will be a test of man's ability, ingenuity and self-restraint.

The world also needs Alaska's water and mineral resources; the question is whether they can be tapped without destroying the living riches of this northern land. To successfully meet this challenge is the highest aspiration of the Department of the Interior.

CAPE NEWENHAM NATIONAL WILDLIFE REFUGE



(Cover photograph) Alaska—breeding ground of over half the world's trumpeter swans.



Date Due

12229 Pam:598.2:(*49)
USBSFW

U.S. Bureau of Sport Fisheries
AUTHOR and Wildlife
To have and to hold; Alaska's
TITLE migratory birds

DATE LOANED	BORROWER'S NAME	DATE DUE
	Bird Display	

12229

BOREAL INSTITUTE
LIBRARY

University of Alberta Library
0 1620 0334 0526